TITLE: AN EXERCISE DEVICE FOR VAGINAL MUSCLE OF A FEMALE

FIELD OF THE INVENTION

This invention relates to an exercising device for use by woman for the vaginal muscles or pelvic muscles, which are the group of muscles involved in women's sexual response.

BACKGROUND OF THE INVENTION

The current publicly known solution for vaginal relaxation caused by birth of children is surgery. It is painful for the patient and it can't strengthen the muscle around the vagina. Its cost is high. Now there is no exercising device for vaginal muscle.

SUMMARY OF THE INVENTION

The object of this invention is to provide an exercising device, by using which women can strengthen their vaginal muscle and solve the problem of vaginal relaxation and thus improve the sexual feeling.

One preferred embodiment of the device of the present invention comprises an elastic tube and inner sealed fluid. During its usage, the device is put into the vagina. Its user will try to tighten the group of vaginal muscles to squeeze said elastic tube and then relax the muscles. Repeating the exercise will strengthen the group of muscles and the problem of vaginal relaxation will be solved.

Said tube can be made of rubber, silica gel or other suitable material. Said fluid can be liquid or gas. The resistance of the device comes from the elastic deformation of the tube and the fluid.

To improve the above said device, a partition component is added in said tube. This component divides the tube into two separated chambers. There is at least one damping hole in the partition component. During use, one chamber is put into the vagina and the other is outside the vagina. When the inner chamber is squeezed by the vagina, the fluid in this chamber will be squeezed into the outside chamber through the said damping hole. In this case, the resistance

comes mostly from the damping hole while the fluid passes through it.

Another solution to improve the above said device is to add elastic parts into the said tube. The part is made up of several elastic semicircles, whose two ends are connected at two nodes. In this case, the resistance comes mostly from the deformation of the elastic parts.

To improve the effect of the vaginal exercise, tubes of different diameters will be provided to the same client. It's especially useful for young mothers who just give birth to children. Users can choose to use different tubes according to their own condition at different exercise stage. By doing so, users can change the squeezing power and choose tubes of appropriate size according to the size of their vaginas. For those who have the problem of vaginal relaxation, tubes of larger diameter will be used at the beginning stage. As the group of vaginal muscles grows stronger, tubes of smaller size will be used.

To maintain a rigid shape and make it possible for users to put the device into their vagina, a brace made of hard material, such as engineering plastic, can be added to the tube. To make it easier to put the tube into vagina, lubricant such as water or vitamin E will be put on the tube's surface. The shape of the tube can be made like the man's penis. Improvement can be made to make the device also function as a massager.

BRIEF DESCRIPTION OF THE DRAWINGS

Three embodiments of the present invention will now be described with reference to the drawings, in which:

Fig. 1 is a longitudinal cross sectional view of the first embodiment of the invention.

Fig. 2 is a longitudinal cross sectional view of the second embodiment of the invention.

Fig. 3 is an enlarged view of the part 4 in Fig. 2.

Fig. 4 is a right side elevational view of the part 5 in Fig. 2.

Fig. 5 is a longitudinal cross sectional view of the third embodiment of the invention.

Fig. 6 is a side elevational view of the part 2 in Fig. 5.

DESCRIPTION OF THE PREFERRED EMBODIMENT

The first embodiment is illustrated in the drawing Fig. 1. The elastic tube 1 is cylindrical, the left end of which is formed as a hemisphere to simulate the glans. The brace 2 is a shaft, whose left end is formed as a shell and right end is conglutinated with the tube 1 to form a sealed chamber. Fluid is sealed in the chamber. The brace 2 can maintain a rigid shape of the device and make it possible for users to put the device into their vagina. When the group of vaginal muscles squeezes the tube 1, the resistance of the device comes from the elastic deformation of the tube 1 and the fluid sealed inside. The tube 1 can be made of elastic material such as rubber, silica gel or other suitable materials. The brace can be made of hard material, such as engineering plastic, metals or other suitable materials. The change of the pressure which is given by the hand to the outer part of the tube 1 will effect the change of the device's resistance. Different resistance at different exercising stages will make for the strengthening of muscles.

The second embodiment is illustrated in the drawing Fig. 2, 3, 4. The elastic tube 1 is conglutinated with the lid 7. They form a sealed chamber with the brace 2, the retainer 6 and the seal 8. The fluid is sealed in the chamber. The partition component 4 is conglutinated with the tube 1 on its round side. The brace 2 is a shaft, whose left end is formed as a shell to protect the tube's left end. The resistance control element 5, the retainer 3 and the retainer 6 are fixed on the brace 2.

The resistance control element 5 and the partition component 4 have a closely touched same-shaped interface. The resistance control element 5 has at least one gap. The partition component 4 is longitudinally fixed on the brace 2 by the retainer 3 and the resistance control element 5. The lid 7 and the seal 8 are longitudinally fixed on the brace 2 by the retainer 6. The seal 8 can prevent the inner fluid from leaking out while the brace 2 rotates in the lid 7. The damping element 10 has a cone-shaped side as shown in the Fig.3. It fits in the cone-shaped hole in the partition component 4. There is a damping hole on the damping element 10. The damping element 10 is limited in the hole of the partition component 4 by the retainer 9 which is a crossed

element. When the vaginal muscle squeezes the left chamber of the tube 1, the damping element 10 will be pressed into the cone-shaped hole of the partition component 4 by the fluid in the left chamber. The fluid in the left chamber will be squeezed into the right chamber of the tube 1 through the damping hole on the damping element 10. So, in this embodiment, the resistance comes mainly from the damping of the fluid by the damping hole. Because the interface of the damping element 10 and the partition component 4 is cone-shaped, when the fluid in the right chamber flows into the left chamber under the pressure of the hand on the right chamber of the tube 1, the damping element 10 will move left to the position of the retainer 9. In this condition, the sectional area of the fluid that passes through the partition component 4 is much larger than when the fluid flows from the left chamber to the right chamber. So the fluid can be quickly pressed back to the left chamber. This structure works like a check valve. As seen in Fig. 4, there can one or more such kind of damping hole on the damping element 10. While the brace 2 rotates relatively to the tube 1, the resistance control element 5 will rotate relatively to the partition component 4. When the resistance control element 5 rotates through different angles, different number of damping holes will be covered by the resistance control element 5. So when the fluid goes from the left chamber to the right chamber, the resistances of the device at different positions are different. So, by rotating the brace 2, the resistance of the device can be changed. The device can offer different resistance for the user. As the vaginal muscle grows stronger, the user can choose stronger resistance for their exercise. Stronger resistance will help the muscle grow stronger. The fluid in the right chamber can go back to the left chamber while the user's hand squeezes the right chamber.

The third embodiment is illustrated in the drawing Fig. 5, 6. The tube 1 is conglutinated with the brace 3 at the right end. The elastic part 2 and 4 are joined by four semiellipses, formed like a football. They can be made of rubber. The brace 3 goes through the center of the elastic part 2 and 4. In this case, the resistance of the device comes from the elastic deformation of the elastic parts.